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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,742	10/17/2003	Junichi Miyakawa	041514-5312	8295
9629	7590	09/27/2004	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			LESPERANCE, JEAN E	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/686,742

Applicant(s)

MIYAKAWA ET AL.

Examiner

Jean E Lesperance

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-17-03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

Claims 1-6 are presented for examination.

### ***Drawings***

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 USC 102 (b) as being unpatentable over the admitted prior art (Fig.1).

As to claim 1, Admitted prior art teaches an organic EL elements are arranged in a matrix (n rows x m columns) in an organic EL display panel 1 corresponding to a display panel; each of the switching elements Sa1 to Sam is controlled in accordance with an anode driver control signal that is supplied from a control circuit corresponding to a control circuit; anode driver control signal IC-2 corresponding to a column electrode driving circuit; cathode driver control circuit IC-3 corresponding to a row electrode driver circuit; and a reset period in synchronization with a line synchronization pulse included in the anode driver control signal, all switching elements of the anode driver IC-2 and cathode driver IC-3 are switched to a pull-down resistor side so as to uniform residual charges in all parasitic capacitances corresponding to set period supplies a first reset potential to each of said plurality of column lines and a second reset potential to each of said plurality of row electrode lines.

As to claim 2, Admitted prior art (Fig.1) teaches in a light emission period, the switching element corresponding to a scanned line (row) in the cathode driver IC 3 is selected and is maintained in the selection state of the pull-down resistor side. On the other hand, the other switching elements of the non-scan lines are switched to the pull-up resistor Rc side (page 3, lines 7-10) corresponding to said first and second reset potentials, said non-light emission control potential, said selection potential are equal to a ground potential, and said non-selection potential is greater than the ground potential.

As to claim 3, Admitted prior art (Fig.1) teach in the anode driver IC 2, any switching elements corresponding to EL elements to be driven are switched in accordance with the anode driver control signal supplied from the control circuit, the

constant current circuits CCg are connected to the column electrode lines, and the other column electrode lines corresponding to non-light emission elements are connected to the ground via the pull-down resistors Ra (Page 3, lines 13-19) corresponding to a number of repeats of said reset period and said light emission period in each of said cycles is adjusted in accordance with a gradation of said image signal.

As to claim 4, Admitted prior art (Fig.1) teaches a reset period in synchronization with a line synchronization pulse included in the anode driver control signal, all switching elements of the anode driver IC-2 corresponding to said column electrode driver circuit supplies the first reset potential or the non-light emission control potential to said plurality of column electrode lines through resistor elements each of which is adjusted in accordance with a gradation of said image signal.

As to claim 5, Admitted prior art (Fig.1) teaches a conventional organic EL display panel corresponding to said light emitting elements are organic electroluminescence elements.

As to claim 6, Admitted prior art (Fig.1) teaches a reset period in synchronization with a line synchronization pulse included in the anode driver control signal, all switching elements of the anode driver IC-2 and cathode driver IC-3 are switched to a pull-down resistor side so as to uniform residual charges in all parasitic capacitances corresponding to generating a column drive control signal and a row drive control signal for each one cycle having a reset period and a light emission period in accordance with an input image signal, the row drive control signal indicating, as a scan line, one line of said plurality of row electrode lines and the column drive control signal

indicating, as a light emission column electrode line corresponding to a capacitive light emitting element driven to emit light on said scan line, at least one line of a plurality of column electrode lines; Each of the constant current driving circuits CCg is a constant current driving circuit having an output stage transistor is for example a PMOS-FET, and supplies a constant current signal to the organic EL elements, which serve as loads, on the basis of a voltage Va that is supplied from an anode driver power circuit (not shown). The pull-down resistors Ra are connected to a ground (Page 2, lines 13-19) corresponding to setting a potential of each of said plurality of column electrode lines in accordance with the column drive control signal; and Each of the switching elements Sc1 to Scn is controlled in accordance with a cathode driver control signal that is supplied from the control circuit. The pull-up resistors Rc are connected to a supply line of a voltage Vc that is supplied from a cathode driver power circuit (not shown) (Page 2, lines 22-27) corresponding to setting a potential of each of said plurality of row electrode lines in accordance with the row drive control signal; a reset period in synchronization with a line synchronization pulse included in the anode driver control signal, all switching elements of the anode driver IC-2 and cathode driver IC-3 are switched to a pull-down resistor side so as to uniform residual charges in all parasitic capacitances corresponding to wherein in said reset period, a first reset potential is supplied to each of said plurality of column electrode lines and a second reset potential is supplied to each of said plurality of row electrode lines, and in said light emission period, the light emission column electrode line is opened and a non-light emission control potential is supplied to column electrode lines other than the light

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emission column electrode line of said plurality of column electrode lines, a selection potential is supplied to the scan line and a non-selection potential is supplied to row electrode lines other than the scan line of said plurality of row electrode lines.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shaalwala, can be reached on (703) 305-4938.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

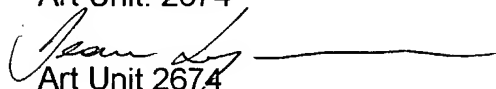
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

Application/Control Number: 10/686,742

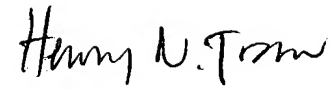
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A handwritten signature in cursive script, appearing to read "Henry N. Tran", followed by a horizontal line.

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Date 9-22-2003

A handwritten signature in cursive script, appearing to read "Henry N. Tran".

HENRY N. TRAN  
PRIMARY EXAMINER